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A Practitioner's View of Mortgage Securitisation

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1. INTRODUCTION

The first Indian asset-backed security transaction was structured by Citibank N. A. with ICICI in October 1990. Since then Citibank, working with various originators, has structured over Rs. 150 crores of asset-backed securities. Even while the number of transactions by itself is limited, each of these transactions has been different from the standpoint of the nature of the underlying receivables, the cash flow structure, the originator-investor profile, method of credit enhancement, etc. Most of the transactions have involved securitization of receivables arising from consumer lending, and hence are directly adaptable to home mortgage securitization. Almost all of the transactions have been subject to the credit rating of CRISIL. The successful completion of these transactions clearly demonstrates the ability of the legal frame-work in India to support asset securitization. In addition, it has shown the capability of the various players, including originators, investors, rating companies and regulators, to understand the methodology behind asset securitization. On the other hand, the failure of this market to evolve into any meaningful size in a three-year time frame is disappointing. Time will tell whether the rapidly changing Indian financial environment, including the evolution of the housing finance sector, will provide the necessary impetus for large-scale development of asset securitization.

The objective of this paper is to articulate the various issues on asset securitization in the Indian context. It is assumed that the readers of this paper are generally conversant with the topic, and no attempt has been made to explain the basic concepts of asset securitization. We hope this presentation of our experience will present a balanced picture on both the opportunities and the limitations of asset securitization and provide some insights to policy makers on the changes that are required in the legal-regulatory and the issuer-investor framework to enable securitization to become a vibrant financial instrument.

We would like to emphasize that views expressed herein are our own, and may not necessarily be subscribed to by Citibank N.A, India.

2. IMPETUS TO ASSET SECURITIZATION

2.0 In the first few transactions that have been completed, the originators have viewed asset securitization simply as an alternative source of funds. They have bench-marked the cost of these funds with debentures of similar duration. Asset securitization has not been approached from the standpoint of interest rate risk, liquidity risk or capital adequacy management. This is not to say that the benefits of securitization on these counts have been entirely overlooked; but in explaining the impetus for transactions completed to date, the search for the lowest-cost funds available has been the driving force.

2.1 The approach from the investor side has been to view asset-backed securities as a method of accessing instruments with retail risks. The approval for mutual funds to invest in securitised debt paper has created a window of opportunity for both the investors and issuers. The expectation from a yield standpoint has been a 1.00% pick-up in yield over instruments with similar duration and credit ratings.

2.2 A number of near-term changes expected in the Indian economic environment promise to make securitization a more attractive alternative than it has been to date. For example:

a) the introduction of capital adequacy norms with respect to banks and the likely extension of this concept to other financial institutions.

b) changes in monetary policy that will make subsidized refinance less available.

c) increase in interest rate volatility on account of gradual freeing up of administered interest rates.

d) development of a rupee yield curve, arising on account of both a range and market based pricing by the Government of the reserve asset portfolio.

e) increasing demand for market-based fixed rate debt instruments. This demand is due to several factors, including the expectation of a rapid increase in the size of money market and debt funds, more investment freedom for pension funds and insurance companies, and the overall scarcity of quality debt instruments.

f) policy level support by the Government of India with particular reference to mortgage-backed securities.

g) general lowering in interest rates that will make securitization attractive from the originator's standpoint.

h) The increase in both the depth and the sophistication level of the debt market will contribute to an increase in the receptiveness of investors to asset-backed securities.

3. LEGAL STRUCTURE

3.0 There are three possible structures (i) pass-through (where the cash flows received are passed on to the investors), (ii) pay-through structures (where the cash flows are reinvested and payments are made at specific intervals) and (iii) stripped and derivative structures (where cash flows received are prioritized among the various investor groups). The transactions completed thus far are pure pass-through structures only. The pay-through structure is not an economically sensible alternative as the earnings on reinvestment in gilt-edged securities yield significantly lower returns than the underlying yield of the instrument. In a theoretical sense stripped and derivative structures are possible; however, the investors have not yet become acquainted with such instruments. Therefore in our view, the pass-through structure will be the only viable instrument.

3.1 After consideration of the various alternatives, we recommend the following structure:

a) Setting up of a special purpose vehicle (SPV). This can be a low- capitalised vehicle which does not have any profit objective. The SPV is a pure pass-through vehicle and does not enhance the credit quality of the asset-backed security. Likewise, the SPV has no other business purposes which could reduce the credit quality of the instrument.

b) The originator and the SPV enter into an agreement whereby the originator offers to sell and the SPV agrees to buy the underlying asset for a defined purchase consideration. Subsequent to the execution of the transaction, the purchase consideration is paid. On payment of the purchase consideration the beneficial interest in the underlying assets vests with the SPV even while the legal title remains with the originator.

c) The originator also executes a 'declaration of trust' wherein he confirms that he holds the legal title in a purely fiduciary capacity.

d) The originator also executes a 'power of attorney' enabling the SPV to transfer the legal title as the attorney of the originator.

e) The SPV issues promissory notes or pass-through certificates or debentures to the investors. The cash flow on these instruments mirrors the cash flow of the underlying assets that are being securitised by the originator. These debt instruments are conditional in that the payment on these instruments is subject to realization from the underlying assets .

3.12 Thus, the above structure has two parts:

(i) transfer of the asset from the originator to the SPV; and

(ii) issuance by the SPV of a debt instrument.

We would like to critically examine both of these components.

3.13 One of the key reasons for the lack of success of asset securitization is the belief on the part of originators of high incidence of stamp cost. We submit that the stamp cost is <u>not</u> a significant impediment. We recommend a structure whereby the beneficial interest in the asset is transferred to the SPV, even while the legal title is held by the originator in trust for the SPV. The legal title is contemplated to be transferred only in the event of certain *force majeure* conditions (e.g., bankruptcy of the originator) to the SPV. As and when this legal title is transferred, the stamp cost will have to be borne. However, the probability of the conditions requiring such an expenditure is very low. Typically, a standby guarantee can be provided by the originator's bank for payment of stamp duty in the event of transfer of the legal title. Yield dilution of the earnings of the investors can thereby be prevented.

3.14 We recommend the beneficial interest route from a variety of standpoints.
First, it is a well-established principle of Indian jurisprudence that assets held in trust (meaning that the legal and the beneficial owners are different persons) belong to the beneficiaries only and are not available to the trustee or to the creditors or the liquidators of the trustee.

Thus, in our example, on payment to the originator of the full purchase consideration, the beneficial interest in the asset vests with the SPV. In the event the originator is subject to bankruptcy proceedings, the underlying assets are not available to its liquidators.

Secondly, we submit that even if there were no stamp cost, it would not be advisable for legal title to the assets to be transferred. This is simply because the process of registration is cumbersome and time consuming. Moreover, title transfer does not provide any significant enhancement of the credit of the security. Even in UK, where the markets are well developed and the process of registration is more streamlined, legal title is not usually transferred in securitization transactions. Hence the value of the beneficial interest route is its underlying strength. It is not primarily an attempt to frustrate any fiscal charges.

Third, the transfer of beneficial interest by itself does not result in any stamp costs. Fourth, upon receipt of the purchase consideration (and the consequent vesting of the beneficial ownership in the asset with the SPV), the sale of the asset has occurred. As a result, the originator cannot reflect the asset in its balance sheet. In the final analysis, off balance sheet treatment is linked to the key question of who owns and benefits from the cash flows from the asset and is not dependent on legal ownership.

Finally, in the event of bankruptcy of the originator, the SPV has a number of alternatives. First, it can transfer the asset to its name. The power of attorney provided for this purpose will be a useful legal document for completing the transfer in the event the originator does not comply with the request for assignment of the debt. Alternatively, the SPV can continue to collect the repayments on the asset as attorney of the originator. It is also possible that the liquidator will proceed with the realization of the asset and forward the amounts realized to the SPV. In view of the fact that the legal title is held in trust by the originator, the proceeds on realization of the debt are not properties of the originator and are hence not available for the liquidators or creditors of the originator. The structure is thus "bankruptcy-remote."

3.15 We now proceed to examine the structure of the SPV. As explained earlier, the SPV is best set up as an independent vehicle and is controlled by persons other than the originator. This is due to two reasons: (i) control of the SPV by the originator does not provide investors with protection from possible conflict of interest of the originator vis-a-vis the investors; and (ii) when consolidated accounting is introduced in India, the assets of the SPV may revert to the originator and thus frustrate the objective of an off-balance sheet treatment of the asset.

3.16 We will now examine the need for a special purpose vehicle. The alternative open to the originator is to transfer the beneficial interest directly to the investors without the medium of an SPV. This approach has the benefit of avoidance of cost and administrative issues in management of an SPV. On the other hand, the following are the disadvantages of direct transfer: (i) investors have to be limited to institutions exempt from tax; and (ii) the absence of a conventional money market instrument may reduce liquidity and thereby increase the yield expectation of the investors.

Investors will have to be institutions exempt from tax because the law provides the Income Tax Department the option of assessing the beneficiary or the trustee (in the same manner and to the same extent as the beneficiary). The originator may not be willing to take tax risks arising out of the option available to the Income Tax Department to levy tax on either of the two parties.

3.17 There are two options on the nature of the debt instrument to be issued by the SPV. It could condition its obligation to pay on the event of realization from the underlying asset. The alternative is for the SPV to issue an unconditional debt instrument and clearly highlight to the investor that the SPV by itself does not add to the credit quality of the instrument. The key benefit of the first alternative is that a single SPV can be the issuer of debts of several series of asset-backed securities. An unconditional agreement to pay would by definition require one SPV for each class of instrument. The management of multiple SPV's would be administratively inconvenient. The disadvantage of having technical infirmity in the debt instrument (i.e., a conditional promise to pay) may be remedied only by a change in the law. However, such a technical infirmity will not affect the rights of the investors and can be expected to become acceptable over a period of time . We believe that changes in law that do not have revenue implications are in general easier to achieve, and the proposed change does not have any revenue implications.

4. ACCOUNTING

4.1 GAAP Accounting

4.11 By GAAP Accounting (Generally Accepted Accounting Principles) we refer to the method of accounting of the balance sheet and profit and loss account submitted to the general public, including equity holders and creditors. In the absence of a specific guideline from the Institute of Chartered Accountants of India on this topic we recommend reliance on international practice . There are two authoritative texts on this topic: (i) The 'Statement of Financial Accounting Standards No.77' (FAS 77) issued by the Federal Accounting Standards Board of the USA in December 1983; and (ii) 'FRED 4' issued in February 1993 by the Accounting Standards Board of UK. The GAAP accounting treatment is reasonably similar under both of these guidelines.

4.12 In terms of FAS 77, the sale of a receivable is said to have taken place if: (i) transferor surrenders control of the future economic benefit embodied in the asset; (ii) transferor's obligations under the recourse provisions can be reasonably estimated; and (iii) transferee cannot require the transferor to repurchase receivables except pursuant to recourse provisions. All of these conditions are met in our proposed structure.

4.13 The consequent accounting treatment is as follows:

a)	Sale value of the asset	XXXX
	Less	
(b)	Book Value of asset	YYYY
	Less	
(c)	Present value of Normal Credit Loss *	ZZ
	Less	
(d)	Present Value of Servicing Costs **	AA
	Net Profit/Loss (a-b-c-d)	BBB

* Normal credit loss is considered if there is recourse to the originator and the amount of recourse exceeds normal losses.

** If there is reimbursement of servicing expenses then this item is removed.

4.14 The balance sheet accounting entries are:

Dr. Cash / bank account
Cr. Asset Account
Cr. Reserve for losses
Cr. Reserve for expenses
Cr. Profit and Loss A/C

On an annual basis, when the expenses for servicing are incurred or the bad-debts crystallize, then these expenses are accounted by debit to the reserve accounts.

4.15 When the level of recourse exceeds normal expected losses, then the amount of such excess recourse must be reflected as a contingent liability.

4.16 One of the questions that has arisen in the Indian context is the "up-fronting" of profits or losses and its impact on the balance sheet. Asset securitization will result in "blips" in the balance sheet, and in certain circumstances may require similar levels of asset sales in the following years to maintain profit levels. We recommend that the published account presentation clearly highlight additional profits/losses on account of securitization so as to explain the financial results in perspective.

4.2 Tax Accounting

4.21 The computation of profit for the purpose of tax is the difference between the sale price and the book value of the asset. The expenses (credit write-off, service and administrative expenses) are allowed as deductions in the year they are incurred.

4.22 For banks and other financial institutions, the receivables are in the nature of a trading asset and are not a capital asset. The consequent profit or loss is business income or expense.

4.23 Originators have also questioned us about the up front profit and loss that arise from securitization.

From a tax standpoint, an alternate structure is to sell the assets at par and provide for allocation of interest income between the originator and the SPV. Such an allocation can be justified only if the originator continues to service the assets, or if there is recourse to the originator for credit losses.

4.30 Regulatory Accounting

4.31 Regulatory accounting applies only to banks which have capital adequacy guidelines and varying risk weights based on the type of assets. Generally speaking, the basic objectives of central banks are to ensure that:

(i) loan sale and packaging achieve their intended benefit of passing the rights and obligations from the seller (bank) to the investors;

(ii) all parties to the transaction fully understand the responsibility and the risk they have assumed or retained; and

(iii) any material risks to the seller (bank) are properly treated in its balance sheet.

4.32 In addition, where administration of the loans remains with the originator, central banks are concerned about whether the originators are under moral pressure to support credit losses that may arise on the portfolio. In addition, where the originator assumes a certain level of recourse (say, the first 5% of the credit losses), the benefit of division of risk is a disproportionate one. Indeed, in securitization transactions where there is a level of recourse, the arrangement is typically a 'top slicing' arrangement with the investor bearing losses only after the originator has borne the first x% of the credit losses.

4.33 The approaches of central banks are not uniform. US Regulatory accounting has the following approach:

i) Profit on sale of an asset is added to the regulatory capital.

ii) If the originator provides recourse, the options are:

a) write off the level of recourse from the regulatory capital and provide off balance sheet treatment for the asset (i.e. asset has zero weightage); or

b) continue to include the asset in the regulatory balance sheet at 100% risk weightage.

4.34 In the UK the amount of recourse is treated as an asset from a regulatory capital standpoint. To illustrate, if there is 10% recourse, then only 90% of the asset is provided with an off-balance sheet treatment. However the recourse in such a case must be by way of over-collateralisation.

4.35 In India the approach is similar to that of the UK with the amount of recourse being shown as deposits. This will result in a reserve requirement against the level of recourse, in addition to providing risk weightage on the asset to the extent of the level of recourse.

4.36 In addition, most central banks require that recourses and warranties on the assets sold must be limited to factors within the control of the bank. For instance, an originator selling auto-loans can warrant that the registration book of the car has hypothecation endorsement, but he cannot warrant that the borrowers will pay the loan on time. The warranties and representations are therefore reviewed to ensure they do not indirectly result in a form of guarantee on due repayment of the assets that have been sold.

5. CREDIT RATING

5.0 Almost all transactions that have been completed have been subject to credit rating . All these credit ratings have been done by CRISIL. The minimum rating level has been A+ and in most transactions, a 'AAA' rating was achieved. In the following discussion, our comments are based primarily on the experience we have had with the CRISIL rating methodology and requirements.

5.1 The purpose of credit rating is to provide investors with a simple system of gradation by which the relative credit strength of the financial instrument may be judged. In addition to the quality of the credit portfolio, the rating agency reviews legal and structural aspects of the transaction.

5.2 A typical process of rating by the rating agency requires the following information:

a) Financial position of the originator including projections over the next three years.

b) The history of the portfolio of assets that is to be sold. For instance, to rate a pool of auto-loans, the repayment behavior of the auto-loans for a period of 3-5 years is required. The rating agency requires that this information be provided in its standard format so as to make comparisons with similar types of transactions rated by it.

c) History of the portfolio of loans based on method of selection of the loans. Typically the rating agency wants the originators to demonstrate the predictive characteristic in the repayment of loans. For instance, if the auto-loans to be sold are seasoned for six months, then the portfolio behavior of similar loans over a period of 3-5 years is required. Our experience suggests that most originators do not have adequate statistical data to highlight the significant predictive indicators.

d) Evaluation of quality of administration of the loans. Typically this process involves review of staffing adequacy, infrastructure, and the quality and timeliness of management information systems.

e) Credit losses and recovery of credit losses. The recovery of credit loss involves analysis of repossession methodology and issues in the sale of repossessed assets. The shortfall on sale of realization of asset is another important indicator.

f) The rating agency performs a due diligence review of the data provided by the originator. It may require this to be supplemented by reports from an independent chartered accountant firm.

5.3 The rating agency also focuses on the originator's system of "investor management." The expectation is that sold loans must be flagged in the computer system, and there must be a method for segregating the cash flows of the loans that have been securitised from the other loans of the originator. The repayments received on the securitised loans must be identified and credited to the escrow account at the earliest. It is our experience that for many originators the time taken to develop the investor management system has been a constraint on the completion of the transaction.

5.4 The rating agency reviews the structure of the transaction from a legal and regulatory standpoint. The emphasis is to ensure that: (i) there has been sale of the asset; and (ii) the transaction is bankruptcy-remote. The rating agency relies on legal opinions that have been provided and may also obtain a legal opinion from its own panel of lawyers.

5.5 Based on the analysis of the overall portfolio of assets and the specific portfolio of loans that have been selected for securitization, the rating agency develops a model that will simulate the shortfall in cash flows over the remaining life of the asset. The focus is on timeliness of cash flows, not on actual credit losses. Thereafter, the rating agency specifies the level of credit enhancement that is required to provide whatever rating is required by investors.

5.6 The rating agency provides high weightage to: (i) loan to value ratio; (ii) debt-servicing standards ratio; (iii) tenor to maturity (lower tenor carries lesser risk); and (iv) portfolio diversification. However, a portfolio that is spread thinly over a number of geographical locations is definitely at a disadvantage due to high servicing and management costs.

5.7 The rating agency requires that any credit enhancement be provided by sources other than the originator. At present, there is no third party insurance available for credit enhancement. Hence in most transactions, originators have provided cash collateral or guarantees to their bankers and obtained credit enhancements from them.

5.8 The rating agency requires that the standard cost of servicing be factored into the cash flow. This approach ensures that in the event of replacement of the originator as the servicing agent of the loans, there will be no significant yield dilution on the transaction to the investors. In other words, the cash flow would be sufficient to employ a substitute loan servicer.

5.9 The rating agency requires an independent, financially sound third party to act as a functional or standby trustee to the transaction. In the event of the originator's bankruptcy, etc., this person is expected to transfer the legal title and appoint an alternate person as the servicing agent. The reputation of the standby trustee is critical to the rating process.

5.10 The rating agency requires certain standard representations and warranties on the quality of service administration. These relate to the exercise of a due level of care in the administration of the portfolio and a tightly defined time table for servicing delinquent accounts. In addition, the rating agency requires that the collection department does not distinguish between loans that have been sold and those that are retained by the originator. This is required to ensure that the quality of follow-up is not diluted with respect to loans that have been sold.

5.11 The rating agency provides a detailed rationale for the rating that has been assigned. We have found this rationale to be an effective tool from the standpoint of marketing the instrument to the investors.

5.12 We expect that in the future, the rating agency will focus on the ability to capture cash flows more tightly. This means that in transactions where there are a number of intermediate points between the collection of installments and the credit to the escrow account of the investor, the probability of loss due to defalcation, etc. will increase and thereby reduce the ability to get the highest rating. We therefore recommend originators to move to a system of collecting post-dated cheques from their borrowers to ensure that repayments can be identified and credited to escrow accounts directly.

5.13 In the transactions rated by the rating agency to date, the level of credit enhancement has been typically 10%-15% of the principal value of loans sold which is 8%-10% of the historical credit losses of the unseasoned loan portfolio of the originator. Further, the absolute amounts of credit enhancement are fixed and have not been reduced with subsequent repayments. We have recommended to the rating agency that there be an annual review of the level of credit enhancement, with pro-rata reduction for principal repayments during the year under review.

5.14 The rating agency requires monthly reports on the behavior of the securitised pool of loans, along with details of utilization of any recourse to the originator. The rating agency reserves the right to downgrade the rating if required. In addition, a semiannual audit by an independent accountant is required for the information provided by the originator.

6. LISTING PROCESS

6.0 We recommend listing of the securitised debt instrument. Typically the objective of listing the instrument is to provide liquidity. However, listing of debt instruments has not added to their liquidity. In our view, the value of listing is its enhancement of the instrument's credibility. Listing will bring focus on the quality of the offer document as well as providing access to a larger pool of investors, as some classes of investors are limited to purchasing listed instruments.

6.1 We have discussed listing of securitised debt with the OTCEI. We had approached OTCEI because of the benefits of a paperless trading system. Whereas certain amendments to law have to be made for OTCEI to list securitised debt instruments, it is possible for it to permit trading of the instrument through the OTCEI network. We recommend that this be pursued as a first step.

6.2 In order for OTCEI to permit trading it is necessary to have an offer document on the instrument. One possible approach is for the SPV to issue a single promissory note in favor of the custodians of OTCEI. Thereafter the exchange will issue depository receipts to the investors. These depository receipts will be traded on the exchange.

6.3 Market-making in the OTCEI is also a function of access to working capital lines for the market maker. Currently such credit facilities are limited and more expensive than the yield on the instrument. Policy makers interested in developing mortgage- backed securities should focus efforts on making affordable credit facilities available to the market maker.

6.4 Listing in the stock exchange and the OTCEI will also require approval from SEBI. Given active Government of India support for development of a secondary market for mortgage-backed securities, along with a credit rating process to provide investors with adequate information, this approval should become available in due course.

7. INVESTORS

7.0 Investor Base

The importance of developing a broad investor base is obvious. An overriding objective in structuring securitized paper is to make it "investor-friendly."

It is important to define what investor-friendly really means before we go on to analyse the available and potential different investor constituencies in India. In other words, what should be the essential attributes of asset-backed securities in emerging markets?

7.1 Securitized Paper in Emerging Markets: Key Attributes

1. Secured/Credit Enhanced
2. Liquid - typically achieved through listing and by developing active secondary markets over a period of time.
3. Low Risk/Reward Ratio
4. Appropriate Tenor (Term)
5. Yields Higher than Comparable Quality Debt
6. Transferable
7. Rated

7.2 Potential Investor Base

Following is a list of potential investors in securitized debt:

- Financial Institutions
- Mutual Funds
- Commercial Banks
- Co-operative Banks
- Finance Companies, including HFC's
- Trusts
- FII's

7.3 Investor Experience in India

Investor experience in India is limited because of the unavailability of securitized paper and the novelty of the instrument. As a result, investors during the emerging stages of these securities are likely to be institutional investors who not only have the risk appetite for such paper, but also the capability to analyse the attendant characteristics which are not comparable to other available instruments in the marketplace. Needless to say, the paper in the emerging stages is being privately placed as opposed to being placed by way of public offerings. Following are some of the reasons why investors have shied away from securitized paper:

a) Inability to understand the underlying risks, for example the attendant risks of purchasing paper backed by auto-loans, despite being credit-enhanced and rated;

b) Poor liquidity; and

c) Limited marketing efforts by originators.

7.4 Comparable Tenor Assets and Indicative Yields

Asset	Security	Liquidity	Tenor	Yields
Treasury Bills	High	Med-High	One	10.50%
Government Securities	High	Med-High	1-2 5	11.5-12.0% 12-13.5%
PS Bonds (taxable)	Rated & Unrated	Low-Med	5-7	12%
Short Term Debentures	Issuer Risk	Low	1-1.5	14-16%

7.5 Pricing Issues

With the current downward pressure on interest rates, yields on Government securities are likely to drop further. This has been evident in the lowering of yields in the recent past, both for Treasury Bills and long-dated government securities. In addition, the yield difference between AAA Corporate/Public Sector debt is likely to narrow. As a result, it is reasonable to expect a bench-mark to be in the region of 14.5%.

8. SOME RECOMMENDATIONS FOR DEVELOPMENT OF THE MORTGAGE-BACKED SECURITIES MARKET

Our approach is to develop recommendations from the standpoint of approaching the Government for a limited number of changes and as far as possible not to press for revenue concessions. We take this approach because we believe there are other players who are better positioned to push for major changes. We as practitioners are used to looking at what is achievable in the framework that is available to us.

8.0 The key concern on the development of mortgage-backed or asset- backed securities has been the potential incidence of stamp cost on the transaction. One could even add that this preoccupation has resulted in neglect of more important factors in the development of an MBS market. The structure recommended by us achieves the purpose without added stamp costs. This structure is in line with what is followed in UK, a country with similar legal framework. Our recommendation is therefore that a test transaction be taken up by a leading HFC and to use that experience as a method of developing a template for asset securitization.

8.1 Another area of confusion in MBS is a common belief that the interest in the security must be transferred to the SPV. Securitization involves packaging of debts, not of physical assets. In addition it must be recognized that there is limited practical value in transfer of security interest. Most housing loan programs are in effect cash flow-based lending. While lenders have the psychological advantage of charge of the property, in reality the process of enforcement of mortgage is a long, drawn-out proposition. Changes in law could make enforcement easier, but nevertheless it is likely for some time to come that the credit is justified only on the repayment capability of the borrower and not on account of a charge on the property.

8.2 Our experience with asset securitization transactions is that there is a very long lead time, particularly in obtaining credit rating. The problem is on two accounts. First is the absence of a history of repayment experience. Second is the absence of good statistical analysis that will make it possible to isolate a specific pool of receivables and obtain a rating with a lower level of recourse. Third is the absence of prepayment data on loans. Finally, development of a complete investor servicing mechanism requires long lead time. We would like to emphasize that both statistical and technological processes to handle securitization are very critical and must be developed.

8.3 Our feedback from investors indicates the need for a well- managed SPV which will be reasonably independent of the originator and which can assure reasonable protection to the investors. The SPV is a low-capitalised vehicle and therefore is not expensive to set up. We recommend that HFC's consider jointly setting up a single SPV with HFC equity contributions which could serve the housing finance sector's needs to issue mortgage-backed securities.

8.4 Another key requirement is the development of standardized lending terms and standardized documentation. These are necessary to facilitate the credit rating process and to develop reliable statistical data about the risk of home mortgage lending in India.

8.5 A critical component for developing mortgage-backed securities is third party credit enhancement. Deregulation in the insurance industry may facilitate availability of credit enhancement at reasonable costs from the insurance companies.

8.6 We believe that NHB needs to be convinced that development of MBS instruments will result in access to funds for housing finance at competitive rates. If NHB is so convinced, it will be possible for NHB to use the funds at its disposal to provide liquidity to a developing MBS market, either directly or through market makers. The availability of liquidity to MBS instruments will definitely enhance them from an investor's point of view. The NHB can in addition provide credit enhancement so that the instrument would be akin to GOI bonds. The pricing for credit enhancement can also be structured so as to make it less expensive for securitization of loans for weaker and poorer sections of society.

8.7 MBS are complex instruments, especially when the intention is to pass off loan prepayment risks to the investors. This calls for development of behavioral models to measure the effective duration of MBS instruments in the Indian environment. There is also a need for research on the management of interest rate and liquidity risk.

8.8 The list of eligible investors in MBS paper needs to be increased to include trusts and provident funds. The Government proposes to permit such funds to invest in stock market instruments (presumably listed) up to 5% of the corpus. In addition the Government has permitted investment in public sector bonds to the extent of 15% of the increase in the corpus. A rated MBS is a safe financial instrument with the added benefit of monthly cash flows. This should make it attractive to trust and provident funds. Permission for provident funds to invest in MBS will contribute to an increase in the size of the market for these securities.